

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	Date: February 6, 2008
V. Boettiger	:	Group Art Unit: 2876
Serial Number: 10/714,289	:	Examiner: A. Kim
Filed: 13 November 2003	:	INTERNATIONAL BUSINESS MACHINES CORPORATION
Title: Method of Entering an Authentication Code into a Chip Card Terminal	:	Intellectual Property Law Department D-IQ0A B-040-3 1701 North Street Endicott, NY 13760

Brief on Appeal

The Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 2213-1450

Dear Sir:

Applicants have given Notice of Appeal from an Official Action mailed 9 November 2005 Finally Rejecting Claims 1 through 16 of this application. The application subsequently became abandoned for failure to pursue the appeal. This Brief accompanies a Petition to Revive the application and the requisite fees for revival and entry of this Brief

Real Party in Interest

The real party in interest in this appeal is the assignee, International Business Machines Corporation.

### Related appeals and interferences

There are no related appeals or interferences.

### Status of claims

Claims 1 through 16 are pending on the original form.

Independent method Claim 1 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent method claim 2 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent method claim 3 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent method claim 4 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent method claim 5 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent method claim 6 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent method claim 7 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent method claim 8 stands finally rejected as obvious under 35 USC 103 in view of the disclosure of Levine U.S. Patent 6,188,309 modified in view of

the disclosure of Housman U.S. Patent 3,541,499. This rejection is appealed.

Independent apparatus claim 9 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent apparatus claim 10 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent apparatus claim 11 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent apparatus claim 12 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent apparatus claim 13 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

Dependent apparatus claim 14 stands finally rejected as obvious under 35 USC 103 in view of the disclosure of Levine U.S. Patent 6,188,309 modified in view of the disclosure of Housman U.S. Patent 3,541,499. This rejection is appealed.

Dependent apparatus claim 15 stands finally rejected as obvious under 35 USC 103 in view of the disclosure of Levine U.S. Patent 6,188,309 modified in view of the disclosure of Housman U.S. Patent 3,541,499. This rejection is appealed.

Independent apparatus claim 16 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed.

#### Status of Amendments

There are no unentered amendments in the application.

Summary of claimed subject matter and explanation of the subject matter of each claim appealed

The technical field of the present invention is defined at lines 8 through 11 of page 1 of the specification as the filed of chip cards, also known as smart cards, data cards, or integrated circuit cards and, more particularly, to chip card authentication. As pointed out beginning in line 23 of page 1, the typical prior art method for authenticating a user to a card by means of an authorization code involves the input of a personal identification number (or PIN) into a terminal at which the card is presented. The PIN is verified by means of the card. This verification is done by comparing the PIN with a reference PIN stored in a secret area of the non-volatile memory of the card. This is a description of the technology of the cited Levine patent. Problems with this technology are pointed out in the present specification beginning at line 1 of page 2.

As stated beginning at line 26 of page 2 of the present specification, the inventive method and apparatus here claimed provide that the authorization code is NOT entered directly into the terminal but is read from a transitory storage on the card itself. Various types of authorization codes are described beginning at line 9 of page 3 of the present specification.

Detailed disclosure begins at line 11 of page 6 of the present specification. Entry of the reference authorization code into memory is described in line 24. Operation in accordance with this invention is described beginning at line 10 of page 7. A user of a card provided with the technology of this invention inputs a code, such as (but not limited to) a PIN through an interface and that entered code is stored in a memory location of the card. Internally to the card, a decryption (if needed) of the previously stored reference code is performed and the reference code and entered code are compared. If both codes are the same, authorization is completed (line 21, page 7). A status bit is then set to indicate that transmittal

of the stored code to an external terminal is enabled and a time is started.

Beginning at line 3 of page 8, it is pointed out that the authorization code is transmitted from the card to the terminal if the state register and timer permit. AS a consequence, the user does not need to enter the authorization code directly into the terminal. The state register is then reset.

Independent Claim 1 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. Claim 1 recites a method having steps of entering an authorization code into a card, storing the code in a memory location of the card, and performing defined processing steps. In these steps, a state is shifted from a first state to a second state (see page 7 of the specification) to enable transmission of the authorization code from the card to a terminal when the card is coupled within a pre-defined period of time (see page 8 of the specification) and then reset the state to the first state. This method is submitted to be patentably distinguished from the prior art relied upon by the Examiner.

Dependent method Claim 2 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the method from Claim 1 by limiting the change of state of the card only in the case of a successful verification of the authorization code. See page 7.

Dependent method claim 3 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the method from Claim 1 by specifically defining a list of authorization codes types. See page 3.

Dependent method claim 4 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the method from Claim 1 by providing that a signal is output when the state of the card is changed. See page 3 and the sentence bridging pages 7 and 8.

Dependent method claim 5 stands finally rejected as anticipated under 35

USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes the method from Claim 4 by defining when the signal is switched off. See page 8.

Dependent method claim 6 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes from Claim 1 by defining circumstances under which the second state of the card will be maintained.

Dependent method claim 7 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes from Claim 1 by defining additional data entered into the card and transmitted to a terminal during a transaction. See page 3.

Dependent method claim 8 stands finally rejected as obvious under 35 USC 103 in view of the disclosure of Levine U.S. Patent 6,188,309 modified in view of the disclosure of Housman U.S. Patent 3,541,499. This rejection is appealed. The claim patentably distinguishes from Claim 1 by reciting a specific circumstance under which the authorization code is erased from the card.

Independent apparatus claim 9 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claims uses "means and function" claiming. Claim 9 recites an apparatus having means for entering an authorization code into a card (the user interface 102 or electronic wallet, page 6 and Figure 1), means for storing the code in a memory location of the card (memory 106, page 6 and Figure 1), and means for performing defined processing steps (microprocessor 104 and the stored program, pages 6, 7 and 9 and Figures 1 and 2). By the cooperation of these elements, a state is shifted from a first state to a second state (see page 7 of the specification) to enable transmission of the authorization code from the card to a terminal when the card is coupled within a pre-defined period of time (see page 8 of the specification) and then reset the state to the first state. This apparatus is submitted to be patentably distinguished from the prior art relied upon by the

Examiner.

Dependent apparatus Claim 10 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the apparatus from Claim 9 by reciting means having the function of verifying the authorization code (the microprocessor 104 and the stored program, pages 6, 7 and 9 and Figures 1 and 2, particularly step 202).

Dependent apparatus claim 11 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the apparatus from Claim 9 by reciting means for outputting a signal as the card state changes (user interface 102, microprocessor 104 and related program instructions, pages 3, 7, 8 and 9, Figure 1 and 2, particularly steps 208 and 210).

Dependent apparatus claim 12 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the apparatus from Claim 11 by providing means which switches off a signal after a pre-defined period of time (the timer recited in line 26 et seq of page 7).

Dependent apparatus claim 13 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes from Claim 9 by providing means which maintains the second state only if a user continuously performs an input action during the time period (see page 4, beginning at line 16)

Dependent apparatus claim 14 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes from Claim 9 by providing means for detecting an unsecure situation and erasing the stored authorization code (see page 4, beginning at line 25).

Dependent apparatus claim 15 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection

is appealed. The claim patentably distinguishes from Claim 14 by specifying the nature of the means for detecting an unsecure situation as being a bending or flexure sensor (see page 4, beginning at line 25).

Independent Claim 16 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. Claim 16 recites a computer program product having program means for performing steps of entering an authorization code into a card, storing the code in a memory location of the card, and performing defined processing steps. In these steps, a state is shifted from a first state to a second state (see page 7 of the specification) to enable transmission of the authorization code from the card to a terminal when the card is coupled within a pre-defined period of time (see page 8 of the specification) and then reset the state to the first state. This program product is submitted to be patentably distinguished from the prior art relied upon by the Examiner.

#### Grounds of rejection to be reviewed

The grounds to be reviewed are:

The rejection of Claims 1-7, 9-13 and 16 under 35 USC 102(b) as anticipated by the disclosure of Levine U.S. Patent 6,188,309.

The rejection of Claims 8, 14, and 15 as obvious under 35 USC 103 in view of the disclosure of Levine U.S. Patent 6,188,309 modified in view of the disclosure of Housman U.S. Patent 3,541,499.

Specifically:

Independent Claim 1 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. Claim 1 recites a method having steps of entering an authorization code into a card, storing the code in a memory location of the card, and performing defined processing steps. In these steps, a state is shifted from a first state to a second state (see page 7 of the specification) to enable transmission of the



authorization code from the card to a terminal when the card is coupled within a pre-defined period of time (see page 8 of the specification) and then reset the state to the first state. This method is submitted to be patentably distinguished from the prior art relied upon by the Examiner.

Dependent method Claim 2 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the method from Claim 1 by limiting the change of state of the card only in the case of a successful verification of the authorization code. See page 7.

Dependent method claim 3 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the method from Claim 1 by specifically defining a list of authorization codes types. See page 3.

Dependent method claim 4 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the method from Claim 1 by providing that a signal is output when the state of the card is changed. See page 3 and the sentence bridging pages 7 and 8.

Dependent method claim 5 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes the method from Claim 4 by defining when the signal is switched off. See page 8.

Dependent method claim 6 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes from Claim 1 by defining circumstances under which the second state of the card will be maintained.

Dependent method claim 7 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes from Claim 1 by defining additional data entered into the card and transmitted to a terminal during a transaction. See

page 3.

Dependent method claim 8 stands finally rejected as obvious under 35 USC 103 in view of the disclosure of Levine U.S. Patent 6,188,309 modified in view of the disclosure of Housman U.S. Patent 3,541,499. This rejection is appealed. The claim patentably distinguishes from Claim 1 by reciting a specific circumstance under which the authorization code is erased from the card.

Independent apparatus claim 9 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim uses “means and function” claiming. Claim 9 recites an apparatus having means for entering an authorization code into a card (the user interface 102 or electronic wallet, page 6 and Figure 1), means for storing the code in a memory location of the card (memory 106, page 6 and Figure 1), and means for performing defined processing steps (microprocessor 104 and the stored program, pages 6, 7 and 9 and Figures 1 and 2). By the cooperation of these elements, a state is shifted from a first state to a second state (see page 7 of the specification) to enable transmission of the authorization code from the card to a terminal when the card is coupled within a pre-defined period of time (see page 8 of the specification) and then reset the state to the first state. This apparatus is submitted to be patentably distinguished from the prior art relied upon by the Examiner.

Dependent apparatus Claim 10 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the apparatus from Claim 9 by reciting means having the function of verifying the authorization code (the microprocessor 104 and the stored program, pages 6, 7 and 9 and Figures 1 and 2, particularly step 202).

Dependent apparatus claim 11 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the apparatus from Claim 9 by reciting means for outputting a signal as the card state changes (user interface

102, microprocessor 104 and related program instructions, pages 3, 7, 8 and 9, Figure 1 and 2, particularly steps 208 and 210).

Dependent apparatus claim 12 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. This claim patentably distinguishes the apparatus from Claim 11 by providing means which switches off a signal after a pre-defined period of time (the timer recited in line 26 et seq of page 7).

Dependent apparatus claim 13 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes from Claim 9 by providing means which maintains the second state only if a user continuously performs an input action during the time period (see page 4, beginning at line 16)

Dependent apparatus claim 14 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes from Claim 9 by providing means for detecting an unsecure situation and erasing the stored authorization code (see page 4, beginning at line 25).

Dependent apparatus claim 15 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. The claim patentably distinguishes from Claim 14 by specifying the nature of the means for detecting an unsecure situation as being a bending or flexure sensor (see page 4, beginning at line 25).

Independent Claim 16 stands finally rejected as anticipated under 35 USC 102(b) by the disclosure of Levine U.S. Patent 6,188,309. This rejection is appealed. Claim 16 recites a computer program product having program means for performing steps of entering an authorization code into a card, storing the code in a memory location of the card, and performing defined processing steps. In these steps, a state is shifted from a first state to a second state (see page 7 of the specification) to enable transmission of the authorization code from the card to a terminal when the card is coupled within a pre-defined period of time (see page

8 of the specification) and then reset the state to the first state. This program product is submitted to be patentably distinguished from the prior art relied upon by the Examiner.

## Argument

### Rejections under 35 USC 102(b)

#### Rejection of Claim 1

The attention of the Examiner has previously been drawn to the recitation, in this application, of precisely what is transmitted to a terminal and the disclosure, in Levine U.S. Pat. 6,188,309, of what is transmitted to a terminal. In this application, it is the **PIN**; in Levine, the **card number**. These are different elements.

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed below, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 1 of the present application.

Referring to claim 1, the recitation is to : "enable transmission of the **authorization code** from the memory location to the chip card terminal". In the Levine passage helpfully cited by the Examiner on Page 2 of the Official Action (Col. 4, lines 23 et seq.) the teaching is: "At step 115, the user inputs a sequence of digits using number keys 46 on keypad 44. The processor 62 receives the sequence of numbers input by the user and compares the received sequence of numbers to the

stored PIN. If there is a match between the received sequence and the stored PIN number the processor activates the credit card 30. In the credit card of Fig. 2A, the processor activates the credit card by applying a current to the magnetic strip 42 along wire 66. By applying a current to magnetic strip 42, the magnetic strip is activated to output **the credit card number** encoded thereon. " (Emphasis added in both instances.)

It is respectfully submitted that, as acknowledged by Levine, a PIN and an account number are different.

### Rejection of Claim 2

In rejecting Claim 2, the Examiner equates a PIN and an account number. No support for this assertion is stated to be found in Levine (as indeed it cannot).

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 2 of the present application.

It is respectfully submitted that this is an unwarranted assumption on the part of the Examiner which departs from the teaching of Levine. Such an assumption is improper in an anticipation rejection.

### Rejection of Claim 3

In rejecting Claim 3, the Examiner has helpfully referenced a passage in Column 4 of Levine beginning at line 51. Levine does not there (or elsewhere, insofar as can be determined) define the credit card authorization system to which the credit card number and transaction amount are transmitted. However, since the clerk who swiped the card must wait for an acknowledgment (line 54 et seq), it would appear that this system is a remote bank owned facility. This process is familiar to all users of credit cards and specifically does not address the range of types of authorization codes recited in Claim 3.

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 3 of the present application.

### Rejection of Claim 4

In rejecting Claim 4, the Examiner helpfully references a passage in Column 1 of Levine, beginning at line 53, where is found: "In yet another embodiment, the credit card includes one or more optical transmitting devices for outputting the credit card number as optical signals when the card is activated". This is not the signal claimed by applicant. How is the user to detect this signal as indicative that the state of the card has changed? Is the optical signal continued, or transistroy?

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 4 of the present application.

#### Rejection of Claim 5

For purposes of rejection, Claim 5 was grouped with Claims 1, 9, 12 and 16. No attempt was made to address the patentable distinction between Claim 1 (or the others) and Claim 5, which distinguishes the method from Claim 4 by defining when the signal is switched off. See page 8. Here, the Examiner has failed to show in Levine either the position taken with regard to Claim 1 or the position taken in regard to Claim 4, much less any position relative to the claim at issue.

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 5 of the present

application.

#### Rejection of Claim 6

The rejection of Claim 6 is out of hand, with only a brief statement, absent any asserted foundation in the cited art, that “the user may perform additional activities via terminal or POS while the card is activated”. This is non-responsive to the recited patentable distinction by defining circumstances under which the second state of the card will be maintained.

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 6 of the present application.

#### Rejection of Claim 7

The rejection of Claim 7 is out of hand (lumped with Claims 6 and 13), with only a brief statement, absent any asserted foundation in the cited art, that “the user may perform additional activities via terminal or POS while the card is activated. This is non-responsive to the recited patentable distinction defining additional data entered into the card and transmitted to a terminal during a transaction. See page 3.

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102,



all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 7 of the present application.

#### Rejection of Claim 9

Claim 9 uses "means and function" claiming. Claim 9 recites an apparatus having means for entering an authorization code into a card (the user interface 102 or electronic wallet, page 6 and Figure 1), means for storing the code in a memory location of the card (memory 106, page 6 and Figure 1), and means for performing defined processing steps (microprocessor 104 and the stored program, pages 6, 7 and 9 and Figures 1 and 2). By the cooperation of these elements, a state is shifted from a first state to a second state (see page 7 of the specification) to enable transmission of the authorization code from the card to a terminal when the card is coupled within a pre-defined period of time (see page 8 of the specification) and then reset the state to the first state. This apparatus is submitted to be patentably distinguished from the prior art relied upon by the Examiner.

For purposes of rejection, Claim 9 was grouped with Claims 1, 5, 12 and 16.

The attention of the Examiner has previously been drawn to the recitation, in this application, of precisely what is transmitted to a terminal and the disclosure, in Levine U.S. Pat. 6,188,309, of what is transmitted to a terminal. In this application, it is the PIN; in Levine, the card number. These are different elements.

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 9 of the present application.

Referring to Claim 9, the recitation is of: "means for changing a state ... to enable transmission of the authorization code to a chip card terminal". In the Levine passage helpfully cited by the Examiner on Page 2 of the Official Action (Col. 4, lines 23 et seq.) the teaching is: "At step 115, the user inputs a sequence of digits using number keys 46 on keypad 44. The processor 62 receives the sequence of numbers input by the user and compares the received sequence of numbers to the stored PIN. If there is a match between the received sequence and the stored PIN number the processor activates the credit card 30. In the credit card of Fig. 2A, the processor activates the credit card by applying a current to the magnetic strip 42 along wire 66. By applying a current to magnetic strip 42, the magnetic strip is activated to output the credit card number encoded thereon." (Emphasis added in both instances.)

#### Rejection of Claim 10

Claim 10 (grouped with Claim 2 for rejection) patentably distinguishes the apparatus from Claim 9 by reciting means having the function of verifying the authorization code (the microprocessor 104 and the stored program, pages 6, 7 and 9 and Figures 1 and 2, particularly step 202). In rejecting Claim 10, the Examiner equates a PIN and an account number. No support for this assertion is

stated to be found in Levine (as indeed it cannot).

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 10 of the present application.

It is respectfully submitted that this is an unwarranted assumption on the part of the Examiner which departs from the teaching of Levine. Such an assumption is improper in an anticipation rejection.

#### Rejection of Claim 11

Claim 11 patentably distinguishes the apparatus from Claim 9 by reciting means for outputting a signal as the card state changes (user interface 102, microprocessor 104 and related program instructions, pages 3, 7, 8 and 9, Figure 1 and 2, particularly steps 208 and 210). For purposes of rejection, the Examiner grouped Claims 4 and 11.

In rejecting Claim 11, the Examiner helpfully references a passage in Column 1 of Levine, beginning at line 53, where is found: "In yet another embodiment, the credit card includes one or more optical transmitting devices for outputting the credit card number as optical signals when the card is activated". This is not the signal claimed by applicant. How is the user to detect this signal as indicative that the state of the card has changed? Is the optical signal continued, or transitory?

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 11 of the present application.

#### Rejection of Claim 12

Claim patentably distinguishes the apparatus from Claim 11 by providing means which switches off a signal after a pre-defined period of time (the timer recited in line 26 et seq of page 7). For purposes of rejection Claim 12 was grouped with Claims 1, 5, 9, and 16. No attempt was made to address the specific recitations of Claim 12, which patentably distinguishes the apparatus from Claim 11 by providing means which switches off a signal after a pre-defined period of time (the timer recited in line 26 et seq of page 7). Here, the Examiner has failed to show in Levine either the position taken with regard to Claim 9 or the position taken in regard to Claim 11, much less any position relative to the claim at issue.

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim."

*Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 12 of the present application.

### Rejection of Claim 13

Claim 13 patentably distinguishes from Claim 9 by providing means which maintains the second state only if a user continuously performs an input action during the time period (see page 4, beginning at line 16). For purposes of rejection, Claim 13 is grouped with Claim 6. As with Claim 6, the rejection of Claim 13 is out of hand, with only a brief statement, absent any asserted foundation in the cited art, that "the user may perform additional activities via terminal or POS while the card is activated". This is non-responsive to the recited patentable distinction by defining circumstances under which the second state of the card will be maintained.

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 13 of the present application.

### Rejection of Claim 16

For purposes of rejection, Claim 16 was grouped with Claims 1, 5, 9 and 12. Claim 16 recites a computer program product having program means for performing steps of entering an authorization code into a card, storing the code in a memory location of the card, and performing defined processing steps. In these steps, a state is shifted from a first state to a second state (see page 7 of the specification) to enable transmission of the authorization code from the card to a terminal when the card is coupled within a pre-defined period of time (see page 8 of the specification) and then reset the state to the first state. The rejection points to Levine's card and not any program product or digital storage medium on which such a program is stored.

The attention of the Examiner has previously been drawn to the recitation, in this application, of precisely what is transmitted to a terminal and the disclosure, in Levine U.S. Pat. 6,188,309, of what is transmitted to a terminal. In this application, it is the PIN; in Levine, the card number. These are different elements.

For a cited reference to be prior art within the meaning of 35 U.S.C. § 102, all of the claim limitations must be anticipated by the cited reference. (See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.1987).) MPEP 2131 further details: "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir.1989.) As discussed, the reference on which the Examiner relies does not set forth each and every element as set forth in Claim 16 of the present application.

Referring to Claim 16, the recitation is of a program product which: "changes a state ... to enable transmission of the authorization code to a chip card terminal". In the Levine passage helpfully cited by the Examiner on Page 2 of the Official Action (Col. 4, lines 23 et seq.) the teaching is: "At step 115, the user inputs a

sequence of digits using number keys 46 on keypad 44. The processor 62 receives the sequence of numbers input by the user and compares the received sequence of numbers to the stored PIN. If there is a match between the received sequence and the stored PIN number the processor activates the credit card 30. In the credit card of Fig. 2A, the processor activates the credit card by applying a current to the magnetic strip 42 along wire 66. By applying a current to magnetic strip 42, the magnetic strip is activated to output the credit card number encoded thereon. “ (Emphasis added in both instances.)

### Rejections under 35 USC 103

#### Rejection of Claim 8

Claim 8 is a method claim which patentably distinguishes from Claim 1 by reciting a specific circumstance under which the authorization code is erased from the card. As argued above, the rejection of Claim 1 on the base reference to Levine is improper and should be reversed on appeal. Additionally, the proposed combination of teachings falls short of making the required *prim facie* case of obviousness. Claim 8 was grouped with Claims 14 and 15 for purposes of rejection.

Claim 8 recites the step of “erasing the authorization code from the memory location” in the event of an unsecure situation being detected. The Examiner concedes that there is no such teaching in Levine, looking to Housman U.S. Patent 3,641,499 for that suggestion.

Housman teaches that a fuse 29 (Figure 6, Column 2 line 48 et seq – the Examiner references the claims of Housman in Column 4) provided in a card will be intentionally blown should a user fail to enter a correct sequence of keystrokes on inserting the card into a reader. There is absent from Housman any teaching or suggestion of a memory location which retains an authorization code in the sense claimed here (see the discussion above of Claim 1) or of erasing a memory.

Instead, Housman disables a card by blocking any possibility of access to information possibly stored in the switches there taught. The Housman teaching predates Levine by nearly thirty years. It is challenged that anyone with the skill of a person working in the art in 1998 or 2003 would look back to such a radically different technology.

As has been pointed out, the Examiner has made an unacceptable leap of imagination. The Graham v Deere test for obviousness under 35 USC 103 is the subject matter of Section 2141 et seq in the Manual of Patent Examining Procedure. To briefly restate, the three inquiries set forth by the Court, in order, are to determine the applicable prior art, then determine the differences between that art and the claimed invention, and then determine whether a person of ordinary skill in the applicable art would know to make the modification necessary to arrive at those differences in view of the prior art applied.

As has been stated by the Court of Appeals for the Federal Circuit in considering matters on appeal from the Board of Appeals within the Patent Office, obviousness is a question of law (the Court citing Graham v Deere), but this determination occurs in the context of a factual inquiry regarding the scope and content of the prior art. This factual inquiry examines what a reference would have taught or suggested to one of ordinary skill in the art at the time the of the invention (the Court citing Northern Telecom v Datapoint Corp., 908 F.2d 931, 15 USPQ2d 1321). The Court has cautioned against focusing on the obviousness of the differences between the claimed invention and the prior art rather than the obviousness of the claimed invention as a whole as 35 USC 103 requires (citing Hybritech, Inc. v Monoclonal Antibodies, Inc., 802 F.2d 1367, 231 USPQ 81) and against the use of hindsight reconstruction of what is disclosed in a prior art reference (citing Grain Processing Corp. v American Maize Products Co., 840 F.2d 902, 5 USPQ2d 1788). The Court has quoted approvingly from its decision in In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780, in which it said:

The mere fact that the prior art may [emphasis added] be modified in the



manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.

On the latter point, the CAFC has said that the Patent Office, in determining the obviousness of a claimed invention that combines known elements, must determine whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination (citing Lindemann Maschinenfabrik GmbH v American Hoist and Derrick Co., 730 F.2d 1452, 221 USPQ 481).

It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. See In re Sernacker, 702 F.2d 989, 995; 217 USPQ 1, 6 (Fed. Cir. 1983). The reviewing court for the Patent Office requires proof by evidence in order to establish a *prima facie* case when the proposition at issue is not supported by a teaching in a prior art reference, common knowledge or capable of unquestionable demonstration. See In re Knapp-Monarch Co., 296 F.2d 230, 232; 132 USPQ 6, 8 (CCPA 1961) and In re Cofer, 354 F.2d 664, 668; 148 USPQ 268, 271-272 (CCPA 1966). See also Section 2143 et seq of the MPEP.

Here, the necessary *prima facie* case has not been established.

#### Rejection of Claim 14

Claim 14 patentably distinguishes from Claim 9 by providing means for detecting an unsecure situation and erasing the stored authorization code (see page 4, beginning at line 25). Claim 14 was grouped for rejection with Claims 8 and 15. As argued above, the rejection of Claim 9 on the base reference to Levine is improper and should be reversed on appeal. Additionally, the proposed combination of teachings falls short of making the required *prim facie* case of

obviousness.

Housman teaches that a fuse 29 (Figure 6, Column 2 line 48 et seq – the Examiner references the claims of Housman in Column 4) provided in a card will be intentionally blown should a user fail to enter a correct sequence of keystrokes on inserting the card into a reader. There is absent from Housman any teaching or suggestion of a memory location which retains an authorization code in the sense claimed here (see the discussion above of Claim 1) or of erasing a memory. Instead, Housman disables a card by blocking any possibility of access to information possibly stored in the switches there taught. The Housman teaching predates Levine by nearly thirty years. It is challenged that anyone with the skill of a person working in the art in 1998 or 2003 would look back to such a radically different technology.

The Graham v Deere test for obviousness under 35 USC 103 is the subject matter of Section 2141 et seq in the Manual of Patent Examining Procedure. To briefly restate, the three inquiries set forth by the Court, in order, are to determine the applicable prior art, then determine the differences between that art and the claimed invention, and then determine whether a person of ordinary skill in the applicable art would know to make the modification necessary to arrive at those differences in view of the prior art applied.

As has been stated by the Court of Appeals for the Federal Circuit in considering matters on appeal from the Board of Appeals within the Patent Office, obviousness is a question of law (the Court citing Graham v Deere), but this determination occurs in the context of a factual inquiry regarding the scope and content of the prior art. This factual inquiry examines what a reference would have taught or suggested to one of ordinary skill in the art at the time the of the invention (the Court citing Northern Telecom v Datapoint Corp., 908 F.2d 931, 15 USPQ2d 1321). The Court has cautioned against focusing on the obviousness of the differences between the claimed invention and the prior art rather than the obviousness of the claimed invention as a whole as 35 USC 103 requires (citing Hybritech, Inc. v Monoclonal Antibodies, Inc., 802 F.2d 1367, 231 USPQ 81) and

against the use of hindsight reconstruction of what is disclosed in a prior art reference (citing Grain Processing Corp. v American Maize Products Co., 840 F.2d 902, 5 USPQ2d 1788). The Court has quoted approvingly from its decision in In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780, in which it said:

The mere fact that the prior art may [emphasis added] be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.

On the latter point, the CAFC has said that the Patent Office, in determining the obviousness of a claimed invention that combines known elements, must determine whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination (citing Lindemann Maschinenfabrik GmbH v American Hoist and Derrick Co., 730 F.2d 1452, 221 USPQ 481).

It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. See In re Sernacker, 702 F.2d 989, 995; 217 USPQ 1, 6 (Fed. Cir. 1983). The reviewing court for the Patent Office requires proof by evidence in order to establish a *prima facie* case when the proposition at issue is not supported by a teaching in a prior art reference, common knowledge or capable of unquestionable demonstration. See In re Knapp-Monarch Co., 296 F.2d 230, 232; 132 USPQ 6, 8 (CCPA 1961) and In re Cofer, 354 F.2d 664, 668; 148 USPQ 268, 271-272 (CCPA 1966). See also Section 2143 et seq of the MPEP.

Here, that burden has not been carried.

### Rejection of Claim 15

Claim 15 patentably distinguishes from Claim 14 by specifying the nature of the means for detecting an unsecure situation as being a bending or flexure sensor (see page 4, beginning at line 25). AS pointed out above, the rejections of base independent Claim 9 and intermediate dependent Claim 14 are deemed improper. Beyond that, Claim 15 recites a specific unsecure situation, namely the bending or flexure of the card. Nothing in any of the art applied teaches or suggests in any way this characteristic of applicant's invention.

As discussed, Housman teaches that a fuse 29 (Figure 6, Column 2 line 48 et seq – the Examiner references the claims of Housman in Column 4) provided in a card will be intentionally blown should a user fail to enter a correct sequence of keystrokes on inserting the card into a reader. There is absent from Housman any teaching or suggestion of a erasing an authorization code in response to bending or flexure of a card. Instead, Housman respond to a failure to enter a correct sequence of keystrokes and disables a card by blocking any possibility of access to information possibly stored in the switches there taught. The Housman teaching predates Levine by nearly thirty years. It is challenged that anyone with the skill of a person working in the art in 1998 or 2003 would look back to such a radically different technology.

The Graham v Deere test for obviousness under 35 USC 103 is the subject matter of Section 2141 et seq in the Manual of Patent Examining Procedure. To briefly restate, the three inquiries set forth by the Court, in order, are to determine the applicable prior art, then determine the differences between that art and the claimed invention, and then determine whether a person of ordinary skill in the applicable art would know to make the modification necessary to arrive at those differences in view of the prior art applied.

As has been stated by the Court of Appeals for the Federal Circuit in considering matters on appeal from the Board of Appeals within the Patent Office, obviousness is a question of law (the Court citing Graham v Deere), but this

determination occurs in the context of a factual inquiry regarding the scope and content of the prior art. This factual inquiry examines what a reference would have taught or suggested to one of ordinary skill in the art at the time the of the invention (the Court citing Northern Telecom v Datapoint Corp., 908 F.2d 931, 15 USPQ2d 1321). The Court has cautioned against focusing on the obviousness of the differences between the claimed invention and the prior art rather than the obviousness of the claimed invention as a whole as 35 USC 103 requires (citing Hybritech, Inc. v Monoclonal Antibodies, Inc., 802 F.2d 1367, 231 USPQ 81) and against the use of hindsight reconstruction of what is disclosed in a prior art reference (citing Grain Processing Corp. v American Maize Products Co., 840 F.2d 902, 5 USPQ2d 1788). The Court has quoted approvingly from its decision in In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780, in which it said:

The mere fact that the prior art may [emphasis added] be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.

On the latter point, the CAFC has said that the Patent Office, in determining the obviousness of a claimed invention that combines known elements, must determine whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination (citing Lindemann Maschinenfabrik GmbH v American Hoist and Derrick Co., 730 F.2d 1452, 221 USPQ 481).

It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. See In re Sernacker, 702 F.2d 989, 995; 217 USPQ 1, 6 (Fed. Cir. 1983). The reviewing court for the Patent Office requires proof by evidence in order to establish a *prima facie* case when the proposition at issue is not supported by a teaching in a prior art reference,

common knowledge or capable of unquestionable demonstration. See In re Knapp-Monarch Co., 296 F.2d 230, 232; 132 USPQ 6, 8 (CCPA 1961) and In re Cofer , 354 F.2d 664, 668; 148 USPQ 268, 271-272 (CCPA 1966). See also Section 2143 et seq of the MPEP.

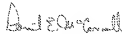
Here, that burden has not been met.

### Conclusion

For the reasons given, it is submitted that this application should be allowed over the art applied in the Final Rejection and passed to issue.

This Brief accompanies a Petition to Revive and authorization for payment of the necessary fees for revival and entry of this Brief.

Respectfully submitted,



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## Claims appendix

- 1 . A method of entering an authorization code into a chip card terminal, the method comprising the steps of:
  - entering the authorization code into a chip card;
  - storing the authorization code in a memory location of the chip card; and
  - changing a state of the chip card from a first state to a second state to enable transmission of the authorization code from the memory location to the chip card terminal when the chip card is coupled to the chip card terminal within a pre-defined period of time and resetting the state from the second to the first state.
- 2 . The method of claim of 1, further comprising verifying the authorization code, and changing the state of the chip card from the first state to the second state only in the case of a successful verification of the authorization code.
- 3 . The method of claim 1, whereby the authorization code is an authentication code, a personal identification number, a transaction number, or an access code.
- 4 . The method of claim 1, whereby an aural, visual or haptic signal is outputted when the state is changed from the first state to the second state.
- 5 . The method of claim 4, whereby the signal is switched off after the pre-defined period of time or after transmission of the authorization code to the terminal.
- 6 . The method of claim 1, further comprising maintaining the second state only if a user continuously performs a predetermined input action during the pre-defined period of time.
- 7 . The method of claim 1, further comprising entering an amount or a transaction code into the chip card, and transmitting the amount or the code to the

terminal when the authorization code is transmitted to the terminal.

8 . The method of claim 1, further comprising erasing the authorization code from the memory location if an unsecure situation is detected during the pre-defined period of time.

9 . A chip card for enabling a transaction, the chip card comprising:  
means for entering an authorization code;  
means for storing the authorization code on the chip card; and  
means for changing a state of the chip card from a first state to a second state to enable transmission of the authorization code to a chip card terminal when the chip card is coupled to the chip card terminal within a predefined period of time and for resetting the state from the second to the first state.

10 . The chip card of claim 9 further comprising means for verification of the authorization code.

11 . The chip card of claim 9, further comprising means for outputting an aural, visual or haptic signal when the state is changed from the first state to the second state.

12 . The chip card of claim 11, further comprising means for switching off the signal after the pre-defined period of time.

13 . The chip card of claim 9, further comprising means for maintaining the second state only if a user continuously performs a predetermined input action during the pre-defined period of time.

14 . The chip card of claim 9, further comprising means for detecting an unsecure situation and erasing the authorization code from the memory location, if an



unsecure situation is detected.

15 . The chip card of claim 14, wherein the means for detecting an unsecure situation comprises a bending or flexural sensor or switch.

16 . A computer program product, stored on a digital storage medium, for entering of an authorization code into a chip card terminal, comprising program means for performing the steps of:

- entering the authorization code into a chip card;

- storing the authorization code in a memory location of the chip card; and

- changing a state of the chip card from a first state to a second state to enable transmission of the authorization code from the memory location to the chip card terminal when the chip is coupled to the chip card terminal within a pre-defined period of time and resetting the state from the second to the first state.

### Evidence appendix

There is no evidence to be provided in this Appendix.

Related proceedings appendix

There are no related proceeding materials to be provided in this appendix.